AF

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	**Tsung-Pei CHIANG et al.**	Examiner:	Kevin M. NGUYEN
Serial No.:	**10/067,680**	Art Unit:	2674
Filed:	February 4, 2002	Our Ref:	B-4493 619511-2
For:	"DRIVING METHOD FOR A POWER-SAVING THIN FILM TRANSISTOR ARRAY"	Date:	January 16, 2007
		Re:	***Appeal to the Board of Appeals***

BRIEF ON APPEAL

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal from the rejection dated July 18, 2006, for the above identified patent application. Enclosed please find a check in the amount of $500.00 for the fee set forth in 37 C.F.R. 1.17(c) for submitting this Brief. The Applicant submits that this Appeal Brief is being timely filed because the notice of Appeal was filed on November 17, 2006.

REAL PARTY IN INTEREST

The present application has been assigned to AU Optronics Corporation of Taiwan, R.O.C.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences related to the present application.

STATUS OF CLAIMS

Claims 12, 13 and 16 are the subject of this Appeal and are reproduced in the accompanying appendix. Claims 1-11, 14-15 and 17-18 have been canceled.

STATUS OF AMENDMENTS

No Amendment After Final Rejection has been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention claimed in claim 12 is directed to a driving method for a Thin Film Transistor array (11) capable of saving power, the method comprising dividing a Thin Film Transistor array frame into a first zone (2, m-1) and a second zone (1, m), the first zone grouped into a graphic region and the second zone grouped into a non-graphic region, and driving the first and second zones respectively with line inversion and frame inversion (p. 3 l. 9 – p.5 l. 2., Figs. 3-6).

The invention claimed in claim 16 is directed to a LCD display comprising an Application Specific Integrated Circuit chip (14) determining a line inversion and a frame inversion, and a Thin Film Transistor array (11) comprising a first zone driven with the line inversion and grouped into a graphic region and a second zone driven with the frame inversion and grouped into a non-graphic region (p. 3 l. 9 – p.4 l. 23, p. 5 ll. 3-21., Figs. 3-6).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Issue 1: Whether Claim 12 is patentable under 35 U.S.C. 102(e) over U.S. Patent No. 6,624,801 to Moriyama (hereinafter "Moriyama").

Issue 2: Whether Claims 13 and 16 are patentable under 35 U.S.C. 103(a) over Moriyama in view of U.S. Patent No. 6,335,719 to An (hereinafter "An").

ARGUMENT

Issue 1: Whether Claim 12 is patentable under 35 U.S.C. 102(e) over U.S. Patent No. 6,624,801 to Moriyama (hereinafter "Moriyama").

In section 5 of the Office Action of July 18, 2006, the Examiner rejects claim 12 as being fully anticipated by Moriyama. Appellants have previously explained why this is not correct - specifically because Moriyama does not in fact teach, disclose or suggest driving a Thin Film Transistor array wherein a first zone is grouped into a graphic region and driven with a line inversion and a second zone is grouped into a non-graphic region and driven with a frame inversion.

With greater particularity, Appellants further noted that at col. 18 ll. 40-63 (cited by the Examiner), Moriyama teaches that only the second display region 32 (from among the first, second, and third display regions 31, 32, and 33) is driven at the usual write period, and that the first and third display regions 31 and 33 are driven at a write period longer than that of the second display region 32. A difference of aspect ratio on the screen (4:3 and 16:9) and the like cause black portions to be induced at the top and bottom of the screen – i.e., the second display region 32 displays the screen grouped into a dynamic picture (corresponding to the graphic region recited in claim 12, as explicitly acknowledged by the Examiner) and the first and third display regions 31 and 33 at the top and bottom of the second display region 32 display black portions (corresponding to the non-graphic region recited in claim 12). Moriyama goes on to teach at col. 16 ll. 33-35 that the first display region 31 (i.e. non-graphic region) employs row line inversion drive and the second display region 32 (i.e. graphic region) employs row frame inversion drive. To summarize, Moriyama teaches a first display region 31 grouped into a non-graphic region and driven with row line inversion drive and a second display region 32 grouped into a graphic region and driven with frame inversion drive. Present claim 12, on the other hand, recites a first zone grouped into a graphic region and driven with line inversion, and a second zone grouped into a non-graphic region and driven with frame inversion.

In section 11 of the Advisory Action of November 21, 2006, the Examiner alleges to answer to the above by essentially repeating his previous rejection and making not the slightest attempt at addressing Appellants' actual arguments.

This is a rather simple inventive concept to grasp, and so are the differences between the asserted Moriyama reference and claim 12. Thus, respectfully, Appellants summarize for the Board's benefit:

Claim 12 - a graphic region driven with line inversion and a non-graphic region driven with frame inversion.

Moriyama - a graphic region driven with frame inversion and a non-graphic region driven with line inversion.

To make it even simpler and pithy, Moriyama teaches the exact opposite of claim 12.

Appellants submit that it is beyond argument that Moriyama does not in fact support the Examiner's rejection, as set forth above, and respectfully request the Board to overturn the Examiner's rejection on appeal and pass this claim to allowance.

Issue 2: Whether Claims 13 and 16 are patentable under 35 U.S.C. 103(a) over Moriyama in view of U.S. Patent No. 6,335,719 to An (hereinafter "An").

In section 8 of the Office Action of July 18, 2006, the Examiner rejects claims 13 and 16 as being unpatentable under 35 U.S.C. 103(a) over Moriyama in view of An.

With respect to claim 13, Appellants note that this claim depends from claim 12 and thus respectfully submit that because claim 12 is in fact novel and nonobvious over the art on record, claim 13 is also novel and nonobvious at least by virtue of its dependency on claim 12.

Claim 16 is an independent claim directed to a display driven with the method of claim 12. Appellants thus submit that the above discussion of the novelty of claim 12 over Moriyama is equally probative of the novelty and nonobviousness of claim 16, and respectfully request the Board to also pass this claim to allowance.

CONCLUSION

For the reasons advanced above, Appellants respectfully contend that each claim is patentable. Therefore, reversal of all rejections and objections and allowance of the case is respectfully solicited.

I hereby certify that this correspondence is being deposited with the United States Post Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

January 16, 2007
(Date of Transmission)

Alma Smalling
(Name of Person Transmitting)

(Signature)

1/16/07
(Date)

Respectfully submitted,

Robert Popa
Attorney for Applicants
Reg. No. 43,010
LADAS & PARRY
5670 Wilshire Boulevard, Suite 2100
Los Angeles, California 90036
(323) 934-2300 voice
(323) 934-0202 facsimile
rpopa@ladasparry.com

Attachments

Claims

12. A driving method for a Thin Film Transistor array, capable of saving power, comprising:

dividing a Thin Film Transistor array frame into a first zone and a second zone, the first zone grouped into a graphic region and the second zone grouped into a non-graphic region; and

driving the first and second zones respectively with line inversion and frame inversion.

13. The method as claimed in Claim 12, further comprising:

implementing an Application Specific Integrated Circuit chip to provide the line inversion and the frame inversion.

16. A LCD display, comprising:

an Application Specific Integrated Circuit chip determining a line inversion and a frame inversion; and

a Thin Film Transistor array, comprising:

a first zone driven with the line inversion and grouped into a graphic region; and

a second zone driven with the frame inversion and grouped into a non-graphic region.

There is no evidence submitted with the present Brief on Appeal.

There are no other appeals or interferences related to the present application.